Amendments to the Claims:

1.   (Cancelled)

2.   (Currently Amended) A method according to Claim ~~1~~ 3 further comprising:
demodulating the traffic of the user in the supplemental channel of the QAM signal based upon the estimate of the amplitude.

3.   (Currently Amended) A method ~~according to Claim 1,~~ comprising:
estimating an amplitude of a signal constellation of a Quadrature Amplitude Modulated (QAM) signal, wherein the signal comprises a pilot channel and a supplemental channel that includes traffic of a user and at least one other user, wherein estimating the amplitude comprises estimating the amplitude based upon a power of a signal combination of a traffic symbol and a pilot symbol, and wherein estimating an amplitude comprises:
            estimating an expectation of the power of the signal combination;
            estimating a bias based upon an energy of a difference between two consecutive pilot symbols and an energy of the current pilot symbol; and
            estimating the amplitude based upon the expectation of the power of the signal combination and the bias.

4.   (Original) A method according to Claim 3, wherein estimating the expectation comprises estimating the expectation based upon a number of symbols in the estimate and a number of active Walsh channels in the QAM signal.

5.   (Currently Amended) A method according to Claim 4, wherein estimating the expectation comprises:
            determining the power of a signal combination of a traffic symbol and a pilot symbol for each symbol in the estimate for each active Walsh channel;
            summing the powers for the symbols for each active Walsh channel into a total power for

each active Walsh channel;

summing the total powers for the active Walsh channels into an aggregate power; and

averaging the aggregate power over the active Walsh channels.

6.   (Currently Amended) A method according to Claim 1 3 further comprising:

receiving, from a receiver, the QAM signal before estimating an amplitude of the QAM signal constellation, wherein the signal is received over at least one slot, and wherein estimating an amplitude of a QAM constellation comprises estimating an amplitude over one of at least one of the at least one slot and or fractions of the at least one slot based upon a speed of the receiver.

7.   (Cancelled)

8.   (Currently Amended) A system according to Claim 7 9 further comprising:

a master controller in electrical communication with the demapping element, wherein the master controller is capable of demodulating configured to demodulate the traffic of the user in the supplemental channel of the QAM signal based upon the estimate of the amplitude.

9.   (Currently Amended) A system according to Claim 7, comprising:

a demapping element configured to estimate an amplitude of a signal constellation of a Quadrature Amplitude Modulated (QAM) signal, wherein the signal comprises a pilot channel and a supplemental channel that includes traffic of a user and at least one other user, wherein the demapping element is configured to estimate the amplitude based upon a power of a signal combination of a traffic symbol and a pilot symbol,

wherein the demapping element is capable of estimating configured to estimate an expectation of the power of the signal combination, and thereafter estimating a bias based upon an energy of a difference between two consecutive pilot symbols and an energy of the current pilot symbol, and wherein the demapping element is capable of estimating configured to estimate the amplitude based upon the expectation of the power of the signal combination and the bias.

10.   (Currently Amended) A system according to Claim 9, wherein the demapping element is ~~capable of estimating~~ configured to estimate the expectation based upon a number of symbols in the estimate and a number of active Walsh channels in the QAM signal.

11.   (Currently Amended) A system according to Claim 10, wherein the demapping element is ~~capable of estimating~~ configured to estimate the expectation by:

determining the power of a signal combination of a traffic symbol and a pilot symbol for each symbol in the estimate for each active Walsh channel;

summing the powers for the symbols for each active Walsh channel into a total power for each active Walsh channel, and thereafter summing the total powers for the active Walsh channels into an aggregate power; and

averaging the aggregate power over the active Walsh channels.

12.   (Currently Amended) A system according to Claim ~~7~~ 9 further comprising:

a receiver in electrical communication with the demapping element, wherein the receiver is ~~capable of receiving~~ configured to receive the QAM signal before estimating an amplitude of the QAM signal constellation, wherein the receiver is ~~capable of receiving~~ configured to receive the signal over at least one slot, and wherein the demapping element is ~~capable of estimating~~ configured to estimate the amplitude over one of at least one of the at least one slot ~~and~~ or fractions of the at least one slot based upon a speed of the receiver.

13.   (Cancelled)

14.   (Currently Amended) A computer program product according to Claim ~~13~~ 15 further comprising:

a second executable portion for demodulating the traffic of the user in the supplemental channel of the QAM signal based upon the estimate of the amplitude.

15.   (Currently Amended) A computer program ~~product according to Claim 13,~~

comprising a computer-readable storage medium having computer-readable program code portions stored therein, the computer-readable program portions comprising:

a first executable portion for estimating an amplitude of a signal constellation of a Quadrature Amplitude Modulated (QAM) signal, wherein the signal comprises a pilot channel and a supplemental channel that includes traffic of a user and at least one other user, and wherein the first executable portion estimates the amplitude based upon a power of a signal combination of a traffic symbol and a pilot symbol, wherein the first executable portion ~~estimates~~ estimating the amplitude ~~by~~ includes:

estimating an expectation of the power of the signal combination;

estimating a bias based upon an energy of a difference between two consecutive pilot symbols and an energy of the current pilot symbol; and

estimating the amplitude based upon the expectation of the power of the signal combination and the bias.

16. (Original) A computer program product according to Claim 15, wherein the first executable portion estimates the expectation based upon a number of symbols in the estimate and a number of active Walsh channels in the QAM signal.

17. (Currently Amended) A computer program product according to Claim 16, wherein the first executable portion estimates the expectation by:

determining the power of a signal combination of a traffic symbol and a pilot symbol for each symbol in the estimate for each active Walsh channel;

summing the powers for the symbols for each active Walsh channel into a total power for each active Walsh channel;

summing the total powers for the active Walsh channels into an aggregate power; and

averaging the aggregate power over the active Walsh channels.

18. (Currently Amended) A computer program product according to Claim ~~13~~ 15 further comprising:

a second executable portion for receiving, from a receiver, the QAM signal before estimating an amplitude of the QAM signal constellation, wherein the signal is received over at least one slot, and wherein the first executable portion estimates the amplitude of a QAM constellation over one of at least one of the at least one slot ~~and~~ or fractions of the at least one slot based upon a speed of the receiver.